IRON AND STEEL ENGINEER INDEX FOR 1938

Herewith is presented the index of all authors, papers, and discussions published in the IRON AND STEEL ENGINEER for the year 1938.

LIST OF AUTHORS

A

ADAMS, J. R.—*Forged Steel Rolls*, December 1938, Page 48.

AIME, F. L., R. B. STEINMETZ, AND S. J. ROSCH—*Selection of Insulated Cables for Steel Mills*, June 1938, Page 60.

B

BAILEY, E. T. W.—*Use of Mixed Gases for Steel Mill Operations*, November 1938, Page 23.

BANCKER, E. H. AND R. H. KAUFMANN—*Continuity of Power Supply for Steel Mills as Influenced by Relaying and System Design*, November 1938, Page 55.

BILLINGER, R. D.—*The Cornwall Furnace, an Early Ironworks of Pennsylvania*, December 1938, Page 68.

BOWERS, GEORGE F.—*The Chemistry of Lubrication*, July 1938, Page 52.

BRAY, L. J. AND C. E. KEW—*Systematic Maintenance of Diesel Electric Locomotives*, May 1938, Page 20.

BURR, WALTER H.—*Developments in the Iron and Steel Industry During 1937*, January, 1938, Page 46.

C

CLARKE, C. W. E.—*Steam Power Developments*, March 1938, Page 15.

CARPENTER, C. H.—*Radiant Tube Annealing Covers*, May 1938, Page 36.

COX, J. H. AND G. E. STOLTZ—*Low Voltage Rectifiers for Industrial Requirements*, December 1938, Page 74.

D

DAUBERT, C. W.—*Air Conditioning as Related to Steel Products Warehouses*, September 1938, Page 33.

DENIG, FRED—*Modern Coke Oven Design and Practice*, October 1938, Page 32.

E

ELLIS, R. H. AND J. L. WHITTEN—*Instrumentation of Modern Strip Mills*, June 1938, Page 42.

F

FISHER, A. J.—*Heavy Oil Burning and Its Control*, December 1938, Page 22.

G

GORDON, R. M.—*American and European Lubrication Practice for Steel Mills*, November 1938, Page 44.

GUTZWILLER, W. E.—*First Power Rectifier in an American Steel Mill*, June 1938, Page 24.

H

HAMILTON, C. P.—*Electrical Equipment for Modern Blast Furnace Skip Hoist*, May 1938, Page 60.

HERSKIND, C. C. AND W. B. SNYDER—*D-C Power Supply for Steel Mill Applications*, August 1938, Page 44.

HOLSLAG, C. J.—*Alternating Current Arc Advance*, March 1938, Page 48.

HUGHES, GROVER A.—*Developments in Welding During 1937*, January 1938, Page 41.

J

JACKSON, J. A.—*D-C Crane Equipment for Modern Steel Mill Cranes*, October 1938, Page 64.

JENNINGS, C. H.—*European Welding Practice and American Trends* October 1938, Page 54.

JOHNSON, J. EDWARD—*Training Engineers for Industry*, March 1938, Page 70.

K

KANE, HOWARD W.—*Cold Roll Forming of Strip Steel*, April 1938, Page 28.

KAUFMANN, R. H. AND E. H. BANCKER—*Continuity of Power Supply for Steel Mills as Influenced by Relaying and System Design*, November 1938, Page 55.

KELLS, L. R.—*Circular Ingot Heating Furnaces*, July 1938, Page 18.

KEW, C. E. AND L. J. BRAY—*Systematic Maintenance of Diesel-Electric Locomotives*, May 1938, Page 20.

KRAUSE, FRANK R.—*A New Metal Rolling Process—Its Theory and Operation*, August 1938, Page 16.

M

MAAG, O. L.—*Steel Mill Lubrication and Lubricants for Anti-Friction Bearings*, February 1938, Page 58.

MAIN, JAMES M.—*Hydraulic Descaling System for Republic Steel Corporation's New 98" Strip Mill*—September 1938, Page 33.

MILBURN, L. R.—*Continuous Pickling of Wide Strip Steel With Flash Welding*, November 1938, Page 32.

MORTON, W. A.—*Studies of Recuperative and Regenerative Furnaces*, January 1938, Page 25.

MOSES, LOUIS—*The Flow of Metal Between Rolls*, February 1938, Page 16.

N

NELSON, D. C.—*Low Voltage Systems in Steel Plants*, March 1938, Page 56.

O

OTIS, A. N.—*Protective Atmospheres for Annealing Furnaces*, February 1938, Page 34.

P

PETERSON, E. L.—*High Voltage Transmission Lines and Towers as Relating to Steel Mill Requirements*, July 1938, Page 36.

PIKE, O. W.—*Power Tubes—Design and Application Problems*, June 1938, Page 29.

R

ROSCH, S. J., R. B. STEINMETZ, AND F. L. AIME—*Selection of Insulated Cables for Steel Mills*, June 1938, Page 60.

S

SCHNURE, F. O. AND R. H. WRIGHT—*Power Requirements of 56" Hot Strip Mill*, May 1938, Page 44.

SMITH, C. J.—*Maintenance and Its Relation to Safety in the Metals Industry*, August 1938, Page 53.

SMITH, E. W. P.—*Cost of Welding and Welded Products*, August 1938, Page 36.

SMITH, I. R.—*Copper-Oxide Rectifiers*, June 1938, Page 33.

SNYDER, W. B. AND C. C. HERSKIND—*D-C Power Supply for Steel Mill Applications*, August 1938, Page 44.

STEINMETZ, R. B., S. J. ROSCH, AND F. L. AIME—*Selection of Insulated Cables for Steel Mills*, June 1938, Page 60.

STOLTZ, G. E. AND J. H. COX—*Low Voltage Rectifiers for Industrial Requirements*, December 1938, Page 74.

T

TRINKS, W.—*Forty Years of Engineering in the Rolling Mill Industry*, March 1938, Page 39.

U

UMANSKY, L. A.—*Direct Current Drives for Runout Tables and Coilers*, March 1938, Page 16.

UMANSKY, L. A.—*Special Problems of Steel Mill Electrification*, July 1938, Page 30.

IRON AND STEEL ENGINEER INDEX FOR 1938

Herewith is presented the index of all authors, papers, and discussions published in the IRON AND STEEL ENGINEER for the year 1938.

LIST OF AUTHORS

A

ADAMS, J. R.—*Forged Steel Rolls*, December 1938, Page 48.

AIME, F. L., R. B. STEINMETZ, AND S. J. ROSCH—*Selection of Insulated Cables for Steel Mills*, June 1938, Page 60.

B

BAILEY, E. T. W.—*Use of Mixed Gases for Steel Mill Operations*, November 1938, Page 23.

BANCKER, E. H. AND R. H. KAUFMANN—*Continuity of Power Supply for Steel Mills as Influenced by Relaying and System Design*, November 1938, Page 55.

BILLINGER, R. D.—*The Cornwall Furnace, an Early Ironworks of Pennsylvania*, December 1938, Page 68.

BOWERS, GEORGE F.—*The Chemistry of Lubrication*, July 1938, Page 52.

BRAY, L. J. AND C. E. KEW—*Systematic Maintenance of Diesel Electric Locomotives*, May 1938, Page 20.

BURR, WALTER H.—*Developments in the Iron and Steel Industry During 1937*, January, 1938, Page 46.

C

CLARKE, C. W. E.—*Steam Power Developments*, March 1938, Page 15.

CARPENTER, C. H.—*Radiant Tube Annealing Covers*, May 1938, Page 36.

COX, J. H. AND G. E. STOLTZ—*Low Voltage Rectifiers for Industrial Requirements*, December 1938, Page 74.

D

DAUBERT, C. W.—*Air Conditioning as Related to Steel Products Warehouses*, September 1938, Page 33.

DENIG, FRED—*Modern Coke Oven Design and Practice*, October 1938, Page 32.

E

ELLIS, R. H. AND J. L. WHITTEN—*Instrumentation of Modern Strip Mills*, June 1938, Page 42.

F

FISHER, A. J.—*Heavy Oil Burning and Its Control*, December 1938, Page 22.

G

GORDON, R. M.—*American and European Lubrication Practice for Steel Mills*, November 1938, Page 44.

GUTZWILLER, W. E.—*First Power Rectifier in an American Steel Mill*, June 1938, Page 24.

H

HAMILTON, C. P.—*Electrical Equipment for Modern Blast Furnace Skip Hoist*, May 1938, Page 60.

HERSKIND, C. C. AND W. B. SNYDER—*D-C Power Supply for Steel Mill Applications*, August 1938, Page 44.

HOLSLAG, C. J.—*Alternating Current Arc Advance*, March 1938, Page 48.

HUGHES, GROVER A.—*Developments in Welding During 1937*, January 1938, Page 41.

J

JACKSON, J. A.—*D-C Crane Equipment for Modern Steel Mill Cranes*, October 1938, Page 64.

JENNINGS, C. H.—*European Welding Practice and American Trends* October 1938, Page 54.

JOHNSON, J. EDWARD—*Training Engineers for Industry*, March 1938, Page 70.

K

KANE, HOWARD W.—*Cold Roll Forming of Strip Steel*, April 1938, Page 28.

KAUFMANN, R. H. AND E. H. BANCKER—*Continuity of Power Supply for Steel Mills as Influenced by Relaying and System Design*, November 1938, Page 55.

KELLS, L. R.—*Circular Ingot Heating Furnaces*, July 1938, Page 18.

KEW, C. E. AND L. J. BRAY—*Systematic Maintenance of Diesel-Electric Locomotives*, May 1938, Page 20.

KRAUSE, FRANK R.—*A New Metal Rolling Process—Its Theory and Operation*, August 1938, Page 16.

M

MAAG, O. L.—*Steel Mill Lubrication and Lubricants for Anti-Friction Bearings*, February 1938, Page 58.

MAIN, JAMES M.—*Hydraulic Descaling System for Republic Steel Corporation's New 98" Strip Mill*—September 1938, Page 33.

MILBURN, L. R.—*Continuous Pickling of Wide Strip Steel With Flash Welding*, November 1938, Page 32.

MORTON, W. A.—*Studies of Recuperative and Regenerative Furnaces*, January 1938, Page 25.

MOSES, LOUIS—*The Flow of Metal Between Rolls*, February 1938, Page 16.

N

NELSON, D. C.—*Low Voltage Systems in Steel Plants*, March 1938, Page 56.

O

OTIS, A. N.—*Protective Atmospheres for Annealing Furnaces*, February 1938, Page 34.

P

PETERSON, E. L.—*High Voltage Transmission Lines and Towers as Relating to Steel Mill Requirements*, July 1938, Page 36.

PIKE, O. W.—*Power Tubes—Design and Application Problems*, June 1938, Page 29.

R

ROSCH, S. J., R. B. STEINMETZ, AND F. L. AIME—*Selection of Insulated Cables for Steel Mills*, June 1938, Page 60.

S

SCHNURE, F. O. AND R. H. WRIGHT—*Power Requirements of 56" Hot Strip Mill*, May 1938, Page 44.

SMITH, C. J.—*Maintenance and Its Relation to Safety in the Metals Industry*, August 1938, Page 53.

SMITH, E. W. P.—*Cost of Welding and Welded Products*, August 1938, Page 36.

SMITH, I. R.—*Copper-Oxide Rectifiers*, June 1938, Page 33.

SNYDER, W. B. AND C. C. HERSKIND—*D-C Power Supply for Steel Mill Applications*, August 1938, Page 44.

STEINMETZ, R. B., S. J. ROSCH, AND F. L. AIME—*Selection of Insulated Cables for Steel Mills*, June 1938, Page 60.

STOLTZ, G. E. AND J. H. COX—*Low Voltage Rectifiers for Industrial Requirements*, December 1938, Page 74.

T

TRINKS, W.—*Forty Years of Engineering in the Rolling Mill Industry*, March 1938, Page 39.

U

UMANSKY, L. A.—*Direct Current Drives for Runout Tables and Coilers*, March 1938, Page 16.

UMANSKY, L. A.—*Special Problems of Steel Mill Electrification*, July 1938, Page 30.

W

WALTER, RALPH C.—*The Use of Extreme Pressure Lubricants*, February 1938, Page 53.

WEICHSEL, H.—*Surges and Their Effects on Transformers*, April 1938, Page 34.

WHITTEN, J. L. AND R. H. ELLIS—*Instrumentation of Modern Strip Mills*, June 1938, Page 42.

WRIGHT, R. H. AND F. O. SCHNURE—*Power Requirements of a 56" Hot Strip Mill*, May 1938, Page 44.

Y

YOUNG, JOHN L.—*Finishing Equipment for Wide Strip Mills*, November 1938, Page 12.

LIST OF SUBJECTS

A

Address Before the A. I. & S. E. Cleveland Section Elementary Electrical Engineering Course—By C. H. ELLIOTT, June 1938, Page 80.

Air Conditioning as Related to Steel Products Warehouses—By C. W. DAUBERT, September 1938, Page 53.

Alternating Current Arc Advance—By C. J. HOLSLAG, March 1938, Page 48.

American and European Lubrication Practice for Steel Mills—By R. M. GORDON, November 1938, Page 44.

American Trends, European Welding Practice and—By C. H. JENNINGS, October 1938, Page 54.

Annealing Covers, Radiant Tube—By C. H. CARPENTER May 1938, Page 36.

Annealing Furnaces, Protective Atmosphere For—By A. N. OTIS, February 1938, Page 34.

Anti-Friction Bearings, Steel Mill Lubrication and Lubricants for—By O. L. MAAG, February 1938, Page 58.

Application Problems, Power Tubes Design and—By O. W. PIKE, June 1938, Page 29.

Arc Advance, Alternating Current—By C. J. HOLSLAG, March 1938, Page 48.

A. I. & S. E. Educational Projects—October 1938, Page 80.

A. I. & S. E. Membership Committee, Report of—October 1938, Page 81.

Atmospheres for Annealing Furnaces, Protective—By A. N. OTIS, February 1938, Page 34.

B

Bearings, Steel Mill Lubrication and Lubricants for Anti-Friction Bearings—By O. L. MAAG, February 1938, Page 58.

Bethlehem Steel Company, Maryland Plant of the—SPECIAL SECTION, April 1938, Page B-1.

Blast Furnace Skip Hoist, Electrical Equipment for Modern—By C. P HAMILTON, May 1938, Page 60.

C

Cables for Steel Mills, Selection of Insulated—By F. L. AIME, R. B. STEINMETZ, AND S. J. ROSCH, June 1938, Page 60.

Chemistry of Lubrication, The—By GEORGE F. BOWERS, July 1938, Page 52.

Circular Ingot Heating Furnaces—By L. R. KELLS, July 1938, Page 18.

Coilers, Direct Current Drives for Runout Tables and—By L. A. UMANSKY, April 1938, Page 16.

Coke Oven Design and Practice, Modern—By FRED DENIG, October 1938, Page 32.

Cold Roll Forming of Strip Steel—By HOWARD W. KANE, April 1938, Page 28.

Committee Report—A. I. & S. E. Cleveland Section Educational Program, June 1938, Page 79.

Continuity of Power Supply for Steel Mills as Influenced by Relaying and System Design—By E. H. BANCKER AND R. H. KAUFMANN, November 1938, Page 55.

Continuous Hot and Cold Strip Mill, Cleveland, Ohio—Republic Steel Corporation's New 98", September 1938, Page R-1.

Continuous Pickling of Wide Strip Steel With Flash Welding—By L. R. MILBURN, November 1938, Page 32.

Continuous Pipe Mill at Spang Chalfant, New—August 1938, Page 30.

Continuous Strip Mill—Jones and Laughlin 96" Hot and Cold Strip Mill.—SPECIAL SECTION, January 1938, Page JL1.

Control, Heavy Oil Burning and Its—By A. J. FISHER, December 1938, Page 22.

Copper Oxide Rectifiers—By I. R. SMITH, June 1938, Page 33.

Cornwall Furnace, An Early Ironworks of Pennsylvania, The—By R. D. BILLINGER, December 1938, Page 68.

Cost of Welding and Welded Products—By E. W. P. SMITH, August 1938, Page 36.

Covers, Radiant Tube Annealing—By C. H. CARPENTER, May 1938, Page 36.

Crane Equipment for Modern Steel Mill Cranes, D-c—By J. A. JACKSON October 1938, Page 64.

Crane Statistics—1937—Electrically Operated—January 1938, Page 65.

Current Drives for Runout Tables and Coilers, Direct—By L. A. UMANSKY, April 1938, Page 16.

D

Descaling System for Republic Steel Corporation's New 98" Strip Mill, Hydraulic—By JAMES M. MAIN, September 1938, Page 33.

Design and Application Problems, Power Tubes—By O. W. PIKE, June 1938, Page 29.

Design and Practice, Modern Coke Oven—By FRED DENIG, October 1938, Page 32.

Detroit Section of A. I. & S. E. Formally Opened Wednesday June 1, 1938, June 1938, Page 80.

Developments in the Iron and Steel Industry During 1937—By WALTER H. BURR, January 1938, Page 46.

Developments in Welding During 1937—By GROVER A. HUGHES, January 1938, Page 41.

Developments, Steam Power—By C. W. E. CLARK, March 1938, Page 15.

Diesel-Electric Locomotives, Systematic Maintenance of—By L. J. BRAY AND C. E. KEW, May 1938, Page 20.

Direct Current Drives for Runout Tables and Coilers—By L. A. UMANSKY, April 1938, Page 16.

D-C Crane Equipment for Modern Steel Mill Cranes—By J. A. JACKSON October 1938, Page 64.

D-C Power Supply for Steel Mill Applications—By W. B. SNYDER AND C. C. HERSKIND, August 1938, Page 44.

Discussion: American and European Lubrication Practice for Steel Mills—Presented by L. F. COFFIN, F. J. THOMAS, C. R. HAND, J. W. KIGHT, R. M. GORDON, R. P. DUNMIRE, H. E. MEYER, E. S. GLAUCH, November 1938, Page 51.

Discussion: The Chemistry of Lubrication—By F. L. GRAY, July 1938, Page 54.

Discussion: Cold Roll Forming of Strip Steel—Presented by R. M. HUGHES, H. P. MUNGER, R. S. SHOEMAKER, C. M. YODER, April 1938, Page 31.

Discussion: Continuity of Power Supply for Steel Mills as Influenced by Relaying and System Designs—By E. H. BANCKER AND R. H. KAUFMANN, November 1938, Page 64.

Discussion: Continuous Pickling of Wide Strip Steel With Flash Welding—Presented by H. W. NEBLETT, A. L. MILTON, L. R. MILBURN, E. E. SCHUKRAFT, F. H. SPEED, C. L. MCGRANAHAN, L. V. PONOMAREFF, November 1938, Page 42.

Discussion: Direct Current Drives for Runout Tables and Coilers—Presented by E. G. SCHLUP, A. M. MACCUTCHEON, H. W. NEBLETT, J. FARRINGTON, AND L. A. UMANSKY, April 1938, Page 24.

Discussion: European Welding Practice and American Trends—Presented by G. A. HUGHES, A. W. STEED, S. D. BAUMER, A. E. GIBSON AND C. H. JENNINGS, October 1938, Page 60.

Discussion: Finishing Equipment for Wide Strip Mills—Presented by R. J. WEAN, E. W. PLUMLEY, AND J. A. CLAUSS, November 1938, Page 20.

Discussion: First Power Rectifier in an American Steel Mill; Power Tubes—Design and Application Problems; and Copper Oxide Rectifiers—Presented by F. O. SCHNURE, L. V. BLACK, L. F. COFFIN, H. H. ANGEL, E. J. NOPPER, H. E. HOUCK, J. C. REED, W. E. GUTZWILLER, O. W. PIKE, and I. R. SMITH, June 1938, Page 37.

Discussion: The Flow of Metal Between Rolls—Presented by L. F. MCGLINCY, C. R. PHIPPS, C. R. HAND, H. K. MAXWELL, C. R. FOX, W. E. GRAINGER, F. O. SCHNURE, L. F. COFFIN, G. B. MCMEANS, W. T. MILLER, W. P. GERHART, J. R. ADAMS, AND LOUIS MOSES, February 1938, Page 16.

Discussion: High Voltage Transmission Lines and Towers as Relating to Steel Mill Requirements,—Presented by J. J. BOOTH, E. C. MARSHALL, C. T. SINCLAIR, WRAY DUDLEY, MERRILL DE MERIT, JAMES FARRINGTON, A. C. MONTEITH, E. L. PETERSON, G. H. CRISS, A. S. FINDLAY, AND C. O. FRANKLIN, July 1938, Page 46.

Discussion: Instrumentation of Modern Strip Mills—Presented by R. H. GELDER, J. R. MCDERMOTT, E. C. MCDONALD, E. D. DUNKAK, P. F. KINYOUN, H. B. BARBER, ROSS LAMB, M. J. BRADLEY, G. E. STOLTZ, A. J. FISHER, AND A. S. GLOSSBRENNER, June 1938, Page 51.

Discussion: Low Voltage Systems in Steel Plants—Presented by L. R. MILBURN, F. R. BURT, J. FARRINGTON, T. E. HUGHES, AND H. A. GLOVER, March 1938, Page 64.
Discussion: Modern Coke Oven Design and Practice—Presented by M. D. WALD, R. W. CAMPBELL, E. J. GARDNER, AND FRED DENIG, October 1938, Page 52.
Discussion: Power Requirements of a 56" Hot Strip Mill—Presented by R. T. GREER, J. A. CLAUSS, L. R. MILBURN, E. G. SCHLUP, AND G. E. SWIFT, May 1938, Page 52.
Discussion: Protective Atmospheres for Annealing Furnaces—Presented by J. H. STRASSBURGER, H. C. BARNES, C. E. PECK, R. J. MCGUIGAN, AND A. N. OTIS, February 1938, Page 47.
Discussion: Selection of Insulated Cables for Steel Mills—Presented by T. B. MCELRAY, E. W. DAVIS, F. L. AIME, E. C. MARSHALL, S. J. ROSCH, JAMES FARRINGTON, E. G. SCHLUP, AND A. D. PETTEE, June 1938, Page 72.
Discussion: Special Problems of Steel Mill Electrification—Presented by L. V. BLACK, J. F. HEADLEE, WRAY DUDLEY AND F. L. GRAY, July 1938, Page 35.
Discussion: Steam Power Developments—Presented by E. R. KAUFMAN, F. C. NORTON, March 1938, Page 39.
Discussion: Steel Mill Lubrication and Lubricants for Anti-Friction Bearings—Presented by H. BERRY AND O. L. MAAG, February 1938, Page 61.
Discussion: Surges and Their Effects on Transformers—By H. WEICHSEL, April 1938, Page 46.
Discussion: Systematic Maintenance of Diesel-Electric Locomotives—Presented by F. S. KNABE, D. M. PETTY, G. C. PFEFFER, J. A. MCTAMNEY, H. B. SPEECE, H. D. ESTERLY, F. O. SCHNURE, L. V. BLACK, L. F. COFFIN, G. J. WALZ, A. H. CANDEE, O. J. GILCHREEST, P. A. MCGEE, L. J. BRAY, AND C. E. KEW, May 1938, Page 30.
Discussion: The Use of Extreme Pressure Lubricants—Presented by C. R. HAND, C. H. JOHNSON, L. F. COFFIN, D. E. MCGUIRE, AND F. L. GRAY, February 1938, Page 56.
Discussion: Use Mixed Gases for Steel Mill Operations—Presented by G. M. COUGHLIN, F. E. LEAHY, P. F. KINYOUN, H. V. FLAGG, J. H. BUCKHOLZ, R. I. GUMAER, E. C. MCDONALD, M. J. CONWAY, A. J. FISHER, P. M. OFFILL, E. T. W. BAILEY, November 1938, Page 28.
Drives for Runout Tables and Coilers, Direct Current—By L. A. UMANSKY, April 1938, Page 16.

E

Early Ironworks of Pennsylvania—The Cornwall Furnace—By R. D. BILLINGER, December 1938, Page 68.
Educational Projects, A. I. & S. E.—October 1938, Page 80.
Effects on Transformers, Surges and Their—By H. WEICHSEL, April 1938, Page 34.
Electric Locomotives, Systematic Maintenance of Diesel—By L. J. BRAY AND C. E. KEW, May 1938, Page 20.
Electric Motors Over 300 Horse Power Applied to Main Roll Drives in the Iron and Steel and Allied Industries During 1937—January 1938, Page 56.
Electrical Equipment for Modern Blast Furnace Skip Hoist—By C. P. HAMILTON, May 1938, Page 60.
Electrically Operated Crane Statistics—January 1938, Page 65.
Electrification, Special Problems of Steel Mill—By L. A. UMANSKY, July 1938, Page 30.
Address Before the A. I. & S. E. Cleveland Section Elementary Electrical Engineering Course—By C. H. ELLIOTT, June 1938, Page 80.
Engineering in the Rolling Mill Industry, Forty Years of—By W. TRINKS, March 1938, Page 42.
Engineers for Industry, Training—By J. EDWARD JOHNSON, March 1938, Page 70.
Equipment for Modern Blast Furnace Skip Hoist, Electrical—By C. P. HAMILTON, May 1938, Page 60.
Equipment for Wide Strip Mills, Finishing—By JOHN L. YOUNG, November 1938, Page 12.
European Lubrication Practice for Steel Mills, American and—By R. M. GORDON, November 1938, Page 44.
European Welding Practice and American Trends—By C. H. JENNINGS, October 1938, Page 54.
Extreme Pressure Lubricants, The Use of—By RALPH C. WALTER, February 1938, Page 34.

F

Finishing Equipment for Wide Strip Mills—By JOHN L. YOUNG, November 1938, Page 12.
First Power Rectifier in an American Steel Mill—By W. E. GUTZWILLER, June 1938, Page 24.
Flash Welding, Continuous Pickling of Wide Strip Steel with—By L. R. MILBURN, November 1938, Page 32.
Flow of Metal Between Rolls, The—By LOUIS MOSES, February 1938, Page 16.
Forged Steel Rolls—By J. R. ADAMS, December 1938, Page 48.
Forming of Strip Steel, Cold Roll—By HOWARD W. KANE, April 1938, Page 28.
Forty Years of Engineering in the Rolling Mill Industry—By W. TRINKS, March 1938, Page 42.
Furnace Skip Hoist, Electrical Equipment for Modern Blast—By C. P. HAMILTON, May 1938, Page 60.
Furnaces, Circular Ingot Heating—By L. R. KELLS, July 1938, Page 18
Furnaces, Protective Atmosphere for Annealing—By A. N. OTIS, February 1938, Page 34.
Furnaces, Studies of Regenerative and Recuperative—By W. A. MORTON, January 1938, Page 25.

G

GIRDLER, TOM M.—*Addresses Banquet of A. I. & S. E.*, October 1938, Page 75.

H

Heating Furnaces, Circular Ingot—By L. R. KELLS, July 1938, Page 18
Heavy Oil Burning and Its Control—By A. J. FISHER, December 1938, Page 22.
High Voltage Transmission Lines and Towers as Relating to Steel Mill Requirements—By E. L. PETERSON, July 1938, Page 36.
Hoist, Electrical Equipment for Modern Blast Furnace Skip—By C. P. HAMILTON, May 1938, Page 60.
Hot and Cold Strip Mill, Jones and Laughlin 96" Continuous Hot and Cold Strip Mill—SPECIAL SECTION, January 1938, Page JL1.
Hot Strip Capacity, New 44" Mill Expands Inland's—October 1938, Page 22.
Hot Strip Mill, Power Requirements of a 56"—By F. O. SCHNURE, AND R. H. WRIGHT, May 1938, Page 44.
Hydraulic Descaling System for Republic Steel Corporation's New 98" Strip Mill—By JAMES M. MAIN, September 1938, Page 33.

I

Industrial Requirements, Low Voltage Rectifiers for—By G. E. STOLTZ AND J. H. COX, December 1938, Page 74.
Industry, Training Engineers for—By J. EDWARD JOHNSON, March 1938, Page 70.
Ingot Heating Furnaces, Circular—By L. R. KELLS, July 1938, Page 18.
Inland's Hot Strip Capacity, New 44" Mill Expands—October 1938, Page 22.
Instrumentation of Modern Strip Mills—By J. L. WHITTEN AND R. H. ELLIS, June 1938, Page 42.
Insulated Cables for Steel Mills, Selection of—By F. L. AIME, R. B. STEINMETZ, AND S. J. ROSCH, June 1938, Page 60.
Iron and Steel Industry During 1937, Developments in the—By WALTER H. BURR, January 1938, Page 46.

J

Jones and Laughlin Steel Corporation, 96" Hot and Cold Continuous Strip Mill—SPECIAL SECTION, January 1938, Page JL1.

L

Largest Strip Mill, Republic Steel Corporation Opens World's—March 1938, Page 73-a.
Lines and Towers as Relating to Steel Mill Requirements, High Voltage Transmission,—By E. L. PETERSON, July 1938, Page 36.
Locomotives, Systematic Maintenance of Diesel-Electric—By L. J. BRAY AND C. E. KEW, May 1938, Page 20.
A Look at the Three-High Sheet Mill—January 1938, Page 70.
Low Voltage Rectifiers for Industrial Requirements—By G. E. STOLTZ AND J. H. COX, December 1938, Page 74.
Low Voltage Systems in Steel Plants—By D. C. NELSON, March 1938, Page 56.
Lubricants, The Use of Extreme Pressure—By RALPH C. WALTER, February 1938, Page 34.
Lubricants for Anti-Friction Bearings, Steel Mill Lubrication and—By O. L. MAAG, February 1938, Page 58.
Lubrication and Lubricants for Anti-Friction Bearings, Steel Mill—By O. L. MAAG, February 1938, Page 58.
Lubrication, The Chemistry of—By GEORGE F. BOWERS, July 1938, Page 52.
Lubrication Practice for Steel Mills, American and European—By R. M. GORDON, November 1938, Page 44.

M

Main Roll Drives in the Iron and Steel and Allied Industries During the Year 1937, Electric Motors Over 300 Horse Power Applied to—January 1938, Page 56.
Maintenance and Its Relation to Safety in the Metals Industry—By C. J. SMITH, August 1938, Page 53.
Maintenance of Diesel-Electric Locomotives, Systematic—By L. J. BRAY AND C. E. KEW, May 1938, Page 20.
Maryland Plant of the Bethlehem Steel Company—SPECIAL SECTION, April 1938, Page B-1.
Membership Committee, Report of A. I. & S. E.—October 1938, Page 81.

Metal Between Rolls, The Flow of—By Louis Moses, February 1938, Page 16.
Metal Rolling Process, Its Theory and Operation, New—By Frank R. Krause, August 1938, Page 16.
Mill at Spang Chalfant, New Continuous Pipe—August 1938, Page 30.
Mill at Youngstown, New Seamless Pipe—May 1938, Page 66.
Mill Cranes, D-C Crane Equipment for Modern Steel—By J. A. Jackson, October 1938, Page 64.
Mill Electrification, Special Problems of Steel—By L. A. Umansky, July 1938, Page 30.
Mill Industry, Forty Years of Engineering in the Rolling—By W. Trinks, March 1938, Page 42.
Mill, Jones and Laughlin 96" Continuous Hot and Cold Strip—January 1938, Page JL1.
Mill, Power Requirements of a 56" Hot Strip—By F. O Schnure and R. H. Wright, May 1938, Page 44.
Mill Lubrication and Lubricants for Anti-Friction Bearings, Steel—By O. L. Maag, February 1938, Page 58.
Mill, Republic Steel Corporation Opens World's Largest Strip—March 1938, Page 73-a.
Mills, Instrumentation of Modern Strip—By J. L. Whitten and R. H. Ellis, June 1938, Page 42.
Mixed Gases for Steel Mill Operations, Use of—By E. T. W. Bailey, November 1938, Page 23.
Modern Blast Furnace Skip Hoist, Electrical Equipment for—By C. P. Hamilton, May 1938, Page 60.
Modern Coke Oven Design and Practice—By Fred Denig, October 1938, Page 32.
Modernization at Wisconsin Steel Works, Recently Completed—January 1938, Page 66.
Modern Steel Mill Cranes, D-C Crane Equipment for—By J. A. Jackson, October 1938, Page 64.
Modern Strip Mills, Instrumentation of—By J. L. Whitten and R. H. Ellis, June 1938, Page 42.

N

National Committees 1938—January 1938, Page 16.
New Continuous Pipe Mill at Spang Chalfant—August 1938, Page 30.
New 44" Mill Expands Inland's Hot Strip Capacity—October 1938, Page 22.
New 96" Continuous Hot and Cold Strip Mill, Jones and Laughlin Steel Corporation's—January 1938, Page JL1.
New 98" Continuous Hot and Cold Strip Mill, Cleveland, Ohio, Republic Steel Corporation's—September 1938, Page R-1.
New Metal Rolling Process, Its Theory and Operation—By Frank R. Krause, August 1938, Page 16.
New Seamless Pipe Mill at Youngstown—May 1938, Page 66.
Newly Elected Officers and Directors, Association of Iron and Steel Engineers, 1938—January 1938, Page 14.

O

Oil Burning and Its Control, Heavy—By A. J. Fisher, December 1938, Page 22.
Otis Steel Company Modernizes Its Wide Strip Mill—September 1938, Page 21.
Oven Design and Practice, Modern Coke—By Fred Denig, October 1938, Page 32.
Oxide Rectifiers, Copper—By I. R. Smith, June 1938, Page 33.

P

Pickling of Wide Strip Steel With Flash Welding, Continuous—By L. R. Milburn, November 1938, Page 32.
Pictogram Showing Application of Electric Motors Over 300 Horse Power Applied to the Iron and Steel and Allied Industries from 1905 to 1937—January 1938, Page 54.
Pipe Mill at Spang Chalfant, New Continuous—August 1938, Page 30.
Pipe Mill at Youngstown, New Seamless—May 1938, Page 66.
Plant of the Bethlehem Steel Company, Maryland—Special Section, April 1938, Page B-1.
Pouring Pit Refractories, Steel Mill—October 1938, Page 72.
Power Developments, Steam—By C. W. E. Clarke, March 1938, Page 15.
Power Rectifier in an American Steel Mill, First—By W. E. Gutzwiller, June 1938, Page 24.
Power Requirements of a 56" Hot Strip Mill—By F. O. Schnure, and R. H. Wright, May 1938, Page 44.
Power Supply for Steel Mill Applications, D-C—By W. B. Snyder and C. C. Herskind, August 1938, Page 44.
Power Supply for Steel Mills as Influenced by Relaying and System Design, Continuity of—By E. H. Bancker and R. H. Kaufmann, November 1938, Page 55.
Power Tubes Design and Application Problems—By O. W. Pike, June 1938, Page 29.
Practice, Modern Coke Oven Design and—By Fred Denig, October 1938, Page 32.
President's Message—By Louis F. Coffin, January 1938, Page 12.
Pressure Lubricants, The Use of Extreme—By Ralph C. Walter, February 1938, Page 34.
Problems of Steel Mill Electrification, Special—By L. A. Umansky, July 1938, Page 30.
Problems, Power Tubes Design and Application—By O. W. Pike, June 1938, Page 29.
Process, Its Theory and Operation, New Metal Rolling—By Frank R. Krause, August 1938, Page 16.
Protective Atmospheres for Annealing Furnaces—By A. N. Otis, February 1938, Page 34.

R

Radiant Tube Annealing Covers—By C. H. Carpenter, May 1938, Page 36.
Recently Completed Modernization at Wisconsin Steel Works—January 1938, Page 66.
Rectifier In An American Steel Mill, First Power—By W. E. Gutzwiller, June 1938, Page 24.
Rectifiers, Copper Oxide—By I. R. Smith, June 1938, Page 33.
Rectifiers for Industrial Requirements, Low Voltage—By G. E. Stoltz and J. H. Cox, December 1938, Page 74.
Recuperative Furnaces, Studies of Regenerative and—By W. A. Morton January 1938, Page 25.
Refractories, Steel Mill Pouring Pit—October 1938, Page 72.
Regenerative and Recuperative Furnaces, Studies of—By W. A. Morton January 1938, Page 25.
Relation to Safety in the Metals Industry, Maintenance and Its—By C. J. Smith, August 1938, Page 53.
Relaying and System Design, Continuity of Power Supply for Steel Mills As Influenced by—By E. H. Bancker and R. H. Kaufmann, November 1938, Page 55.
Report of A. I. & S. E. Membership Committee—October 1938, Page 81.
Republic Steel Corporation's New 98" Continuous Hot and Cold Steel Mill, Cleveland, Ohio—September 1938, Page R-1.
Republic Steel Corporation's New 98" Strip Mill, Hydraulic Descaling System for—By James M. Main, September 1938, Page 33.
Republic Steel Corporation Opens World's Largest Strip Mill—March 1938, Page 73-a.
Requirements of a 56" Hot Strip Mill, Power—By F. O. Schnure and R. H. Wright, May 1938, Page 44.
Roll Forming of Strip Steel, Cold—By Howard W. Kane, April 1938, Page 28.
Rolling Mill Industry, Forty Years of Engineering in the—By W. Trinks, March 1938, Page 42.
Rolling Process, Its Theory and Operation, New Metal—By Frank R. Krause, August 1938, Page 16.
Rolls, The Flow of Metal Between—By Louis Moses, February 1938, Page 16.
Rolls, Forged Steel—By J. R. Adams, December 1938, Page 48.
Runout Tables and Coilers, Direct Current Drives for—By L. A. Umansky, April 1938, Page 16.

S

Safety in the Metals Industry, Maintenance and Its Relation to—By C. J. Smith, August 1938, Page 53.
Seamless Pipe Mill at Youngstown, New—May 1938, Page 66.
Selection of Insulated Cables for Steel Mills—By F. L. Aime, R. B. Steinmetz and S. J. Rosch, June 1938, Page 60.
Sheet Mill, A Look at the Three-High—January 1938, Page 70.
Skip Hoist, Electrical Equipment for Modern Blast Furnace—By C. P. Hamilton, May 1938, Page 60.
Spang Chalfant, New Continuous Pipe Mill at—August 1938, Page 30.
Sparrows Point, Maryland Plant of the Bethlehem Steel Company—Special Section, April 1938, Page B-1.
Special Problems of Steel Mill Electrification—By L. A. Umansky, July 1938, Page 30.
Statistics and Analysis of Electric Motors Over 300 Horsepower Applied to Main Roll Drives in the Iron and Steel and Allied Industries During the Year 1937—January 1938, Page 58.
Steam Power Developments—By C. W. E. Clarke, March 1938, Page 15.
Steel ,Cold Roll Forming of Strip—By Howard W. Kane, April 1938, Page 28.
Steel Company Modernizes Its Wide Strip Mill, Otis—September 1938, Page 21.
Steel Industry During 1937, Developments in the Iron and—By Walter H. Burr, January 1938, Page 46.
Steel Mill Applications, D-C Power Supply for—By W. B. Snyder and C. C. Herskind, August 1938, Page 44.
Steel Mill Cranes, D-C Crane Equipment for Modern—By J. A. Jackson, October 1938, Page 64.
Steel Mill Electrification, Special Problems of—By L. A. Umansky, July 1938, Page 30.
Steel Mill, First Power Rectifier In An American—By W. E. Gutzwiller, June 1938, Page 24.
Steel Mill Lubrication and Lubricants for Anti-Friction Bearings—O. L. Maag, February 1938, Page 58.
Steel Mill Pouring Pit Refractories—October 1938, Page 72.
Steel Mill Requirements, High Voltage Transmission Lines and Towers as Relating to—By E. L. Peterson, July 1938, Page 36.

Steel Mills, Selection of Insulated Cables for—By F. L. AIME, R. B. STEINMETZ, AND S. J. ROSCH, June 1938, Page 60.
Steel Plants, Low Voltage Systems in—By D. C. NELSON, March 1938, Page 56.
Steel Products Warehouses, Air Conditioning As Related To—By C. W. DAUBERT, September 1938, Page 53.
Steel Rolls, Forged—By J. R. ADAMS, December 1938, Page 48.
Strip Mill, Cleveland, Ohio, Republic Steel Corporation's New 98" Continuous Hot and Cold—September 1938, Page R-1.
Strip Mill, Jones and Laughlin Steel Corporation's New 96" Hot and Cold Continuous—SPECIAL SECTION, January 1938, Page JL1.
Strip Mill, Otis Steel Company Modernizes Its Wide—September 1938, Page 21.
Strip Mill, Power Requirements of a 56" Hot—By F. O. SCHNURE AND R. H. WRIGHT, May 1938, Page 44.
Strip Mill, Republic Steel Corporation Opens World's Largest—March 1938, Page 73-a.
Strip Mills, Finishing Equipment for Wide—November 1938, Page 12.
Strip Mills, Instrumentation of Modern—By J. L. WHITTEN AND R. H. ELLIS, June 1938, Page 42.
Strip Steel, Cold Roll Forming of—By HOWARD W. KANE, April 1938, Page 28.
Studies of Regenerative and Recuperative Furnaces—By W. A. MORTON, January 1938, Page 25.
Supply for Steel Mill Applications, D-C Power—By W. B. SNYDER AND C. C. HERSKIND, August 1938, Page 44.
Surges and Their Effects on Transformers—By H. WEICHSEL, April 1938, Page 34.
System Design, Continuity of Power Supply for Steel Mills as Influenced by Relaying and—By E. H. BANCKER AND R. H. KAUFMANN, November 1938, Page 55.
Systematic Maintenance of Diesel-Electric Locomotives—By L. J. BRAY AND C. E. KEW, May 1938, Page 20.
Systems in Steel Plants, Low Voltage—By D. C. NELSON, March 1938, Page 56.

T

Tables and Coilers, Direct Current Drives for Runout—By L. A. UMANSKY, April 1938, Page 16.
The Flow of Metal Between Rolls—By LOUIS MOSES, February 1938, Page 16.
The Use of Extreme Pressure Lubricants—By RALPH C. WALTER, February 1938, Page 34.
Three-High Sheet Mill, A Look at—January 1938, Page 70.
Towers as Relating to Steel Mill Requirements, High Voltage Transmission Lines and—By E. L. PETERSON, July 1938, Page 36.
Training Engineers for Industry—By J. EDWARD JOHNSON, March 1938, Page 70.
Transformers, Surges and Their Effects on—By H. WEICHSEL, April 1938, Page 34.
Transmission Lines and Towers as Relating to Steel Mill Requirements, High—By E. L. PETERSON, July 1938, Page 36.
Tube Annealing Covers, Radiant—By C. H. CARPENTER, May 1938, Page 36.

U

Use of Extreme Pressure Lubricants, The—By RALPH C. WALTER, February 1938, Page 34.
Use of Mixed Gases for Steel Mill Operations—By E. T. W. BAILEY, November 1938, Page 23.

V

Voltage Rectifiers for Industrial Requirements, Low—By G. E. STOLTZ AND J. H. COX, December 1938, Page 74.
Voltage Systems in Steel Plants, Low—By D. C. NELSON, March 1938, Page 56.
Voltage Transmission Lines and Towers as Relating to Steel Mill Requirements, High—By E. L. PETERSON, July 1938, Page 36.

W

Warehouses, Air Conditioning as Related to Steel Products—By C. W. DAUBERT, September 1938, Page 53.
Welded Products, Cost of Welding and—By E. W. P. SMITH, August 1938, Page 36.
Welding and Welded Products, Cost of—By E. W. P. SMITH, August 1938, Page 36.
Welding, Continuous Pickling of Wide Strip Steel With Flash—By L. R. MILBURN, November 1938, Page 32.
Welding During 1937, Developments in—By GROVER A. HUGHES, January 1938, Page 41.
Welding Practice and American Trends, European—By C. H. JENNINGS, October 1938, Page 54.
Wide Strip Mill, Otis Steel Company Modernizes Its—September 1938, Page 21.
Wide Strip Mills, Finishing Equipment for—By JOHN L. YOUNG, November 1938, Page 12.
Wide Strip Steel With Flash Welding, Continuous Pickling of—By L. R. MILBURN, November 1938, Page 32.
Wisconsin Steel Works, Recently Completed Modernization at—January 1938, Page 66.
World's Largest Strip Mill, Republic Steel Corporation Opens—March 1938, Page 73-a.

Y

Youngstown, New Seamless Pipe Mill at—May 1938, Page 66.

YEAR

1937—Developments in the Iron and Steel Industry During—By WALTER H. BURR, January 1938, Page JL1.
1937—Developments in Welding During—By GROVER A. HUGHES, January 1938, Page 41.
1937—Electrically Operated Crane Statistics—January 1938, Page 65.
1937—Statistics and Analysis of Electric Motors Over 300 Horse Power Applied to the Iron and Steel and Allied Industries During the Year—January 1938, Page 58.

SPECIAL NOTICE

Annual Spring Conference

will be held in

BIRMINGHAM, ALA.

MARCH 27-28, 1939

Headquarters—
Hotel TUTWILER

Technical sessions on Monday, March 27

All day inspection trip to Tennessee Coal Iron and Railroad Company on Tuesday, March 28

Further Details Later